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09/785,385	02/16/2001	Charles J. Jacobus	CYB-07102/03	2386
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GIFFORD, KRASS, SPRINKLE, ANDERSON & CITKOWSKI, P.C			CHANKONG, DOHM	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/785,385	<b>Applicant(s)</b> JACOBUS, CHARLES J.	
	<b>Examiner</b> DOHM CHANKONG	<b>Art Unit</b> 2452	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

1. This action is in response to the Board of Patent Appeals and Interferences decision on 7/16/2009 to reverse the rejection of claims 1-23 under 35 U.S.C. § 103(a). The only issue before the Board was whether DeSimone and Waters taught or suggested content-based routing in addition to normal packet routing (BPAI Decision, pg. 5). The Board found that the references only taught normal packet routing but not content-based routing (Pg. 8).

Because the examiner had specific knowledge of the existence of a particular reference which indicate nonpatentability of that particular missing limitation, the matter was submitted to the Technology Center Director for authorization to reopen prosecution. *MPEP* § 1214.04. The Technology Center Director approved reopening prosecution of this application for the purpose of entering the new rejection. *See MPEP* § 1214.07. See the Conclusion section below.

2. Claims 1-23 are presented for further examination.

3. This is a non-final rejection.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1, 3, 4, 6-8, 10, 11, 14-20, 22, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by McCanne, U.S. Patent No. 6,611,872.

5. As to claim 1, McCanne discloses a distributed network computing environment, comprising:

a plurality of clients communicating within a multicast cloud distributed network [column 2 «lines 12-17»] using content-specific data within messages to implement data routing and message culling in a groupware application [column 2 «line 60» to column 3 «line 8»]; using application level data within the packet to control packet distribution | column 4 «lines 20-42»: routers modified to implement routing based on application-specific packets]; and

one or more network routing modules or router-embedded applets operative, in addition to normal packet-routing [column 4 «lines 60-65»: regular unicast routing], to permit or inhibit the distribution of a particular message based upon the content of the message [column 2 «line 60» to column 3 «line 8»].

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6. As to claim 3, McCanne discloses the environment of claim 1, wherein the application is a client-selectable and controllable data service associated with the distribution of audio, video, or other digital signal streams [column 2 «lines 25-31»: digital audio, video/media applications].

7. As to claim 4, McCanne discloses the environment of claim 1, wherein the clients enter, leave, and interact with the cloud through a lobby manager [column 9 «lines 24-42»: McCanne's designated router reads on the lobby manager. The designated router receives requests to join the multicast group | column 17 «lines 35-43»: using leave messages to leave the multicast group].

8. As to claim 6, McCanne discloses the environment of claim 4, wherein the lobby manager is further operative to simultaneously support multiple clouds through multicast or replicated unicast protocols [column 2 «lines 45-49»: joining disjoint and isolated multicast clouds].

9. As to claim 7, McCanne discloses the environment of claim 1, wherein the routing modules implement application-specific message culling to reduce client-cloud communications [column 2 «line 60» to column 3 «line 8»: MediaBridge intelligently filtering flows so that they fit onto a link when there is extra high-bandwidth video flows arriving at a choke point].

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10. As to claims 8 and 20, McCanne discloses the environment of claim 7, wherein the message culling includes message omission, rerouting, and other quality-of-service modifications [column 2 «line 60» to column 3 «line 8» | column 26 «lines 53-56»].

11. As to claim 10, McCanne discloses the application is a massive groupware application involving thousands of world-wide participants [column 1 «lines 29-46»: McCanne's invention directed at delivering media information to "massive numbers of end-users at once"].

12. As to claim 11, McCanne discloses a distributed network computing environment, comprising:

a network-enabled client application [Fig. 2: client];

at least one lobby manager that facilitates communications between the client application and a federation [column 9 «lines 24-42»: McCanne's designated router reads on the lobby manager. The designated router receives requests to join the multicast group]; and

one or more network routing modules or router-embedded applets operative, in addition to normal packet-routing, to permit or inhibit the distribution of a particular message based upon the content of the message to reduce the communications with the federation [column 4 «lines 60-65»: regular unicast routing], to permit or inhibit the distribution of a particular message based upon the content of the message [column 2 «line 60» to column 3 «line 8»].

13. As to claims 14 and 15, McCanne discloses the environment of claim 11, wherein the application is a client selectable and controllable data service [column 2 «lines 25-31»: digital

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audio, video/media applications], wherein the data service includes audio, video, or other type of digital signal feed [column 2 «lines 25-31»].

14. As to claim 16, McCanne discloses the environment of claim 11, wherein the routing modules further support a point-to-multipoint distributed communications model between clients [abstract: multicast].

15. As to claim 17, McCanne discloses the environment of claim 11, wherein: at least some of the client applications run on host platforms [column 5 «lines 20-22»: end hosts | column 6 «lines 11-14»]; and the routing modules further support conventional internet packet routing among the hosts [column 4 «lines 60-65»: regular unicast routing].

16. As to claim 18, McCanne discloses the environment of claim 11, wherein the routing modules further support one or more conventional multicast protocols [abstract: multicast routing].

17. As to claims 22 and 23, McCanne discloses the environment of claim 11, wherein the lobby manager is further operative to simultaneously process multiple federations [column 2 «lines 45-49»: joining disjoint and isolated multicast clouds], wherein the federations communicate through multicast or replicated unicast protocols column 2 «lines 45-49»: joining disjoint and isolated multicast clouds].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 2, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCanne in view of Lambright et al. (U.S. Patent Number 6,015,348), hereinafter referred to as Lambright.

19. Lambright was previously cited by Applicant in the IDS filed on 7/22/2004.

20. As to claims 2, 12, and 13, McCanne does not expressly disclose that the application is a distributed simulation or game. However, McCanne does disclose an application as a multi-user digital audio/video/media application operating in a distributed manner across heterogeneous networks [column 2 «lines 25-31»]. Like McCanne, Lambright also discloses a multi-user digital media application but Lambright further disclose this application is a game that can be implemented for thousands of participants [column 1 «lines 14-33»].

Since the inventions of McCanne and Lambright encompass the same field of endeavor, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify McCanne's multi-user digital video/audio application by adding the use of an application which was a simulation or game and the ability to reach thousands of participants



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as provided by Lambright. This would make sense because it would be an ideal utilization of the network for a different purpose, specifically online gaming. *See MPEP § 2143.*

21. Claims 5 and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over McCanne in view of Engstrom et al, U.S. Patent No. 6,463,078 ["Engstrom"].

22. As to claims 5 and 21, McCanne does not expressly disclose that the lobby manager is further operative to validate the client application for compatibility with the federation and download data to correct for deficiencies. However, such a feature was well known in the art at the time of Applicant's invention as evidenced by Engstrom.

Like McCanne, Engstrom is directed to a multi-user digital media application. Engstrom discloses a multi-user video game that includes a lobby manager wherein the lobby manager is further operative to validate the client application for compatibility with the federation and download data to correct for deficiencies [column 16 «lines 1-20»: lobby manager used to determine compatible applications and to download specific parameters to insure compatibility].

It would have been obvious to one of ordinary skill in the art to have modified McCanne to include the functionality of Engstrom's lobby manager. Such a modification is an example of using a known technique [Engstrom's lobby manager checks for compatible applications on user computers] to improve similar system [McCanne's multiuser digital media application] in the same way [McCanne's system improved because application with different versions may still communicate with one another]. *See MPEP § 2143.*

23. Claim 9 is rejected under 35 U.S.C. § 103 (a) as being unpatentable over McCanne in view of Bayrakeri, U.S. Patent No. 6,185,602.

24. As to claims 9 and 19, McCanne does not expressly disclose the application communicates internal state changes into the cloud or federation through an API. However, such a feature was well known in the art at the time of Applicant's invention as evidenced by Bayrakeri. Like McCanne, Bayrakeri is directed to a system of multi-user interaction for multimedia communication [Fig. 4 «item 412» | column 2 «lines 14-22»]. McCanne further discloses an application communicating internal state changes into a multicast cloud through an API [column 6 «lines 52-65»].

It would have been obvious to one of ordinary skill in the art to have modified McCanne's system to include Bayrakeri's API for communicating state changes through a multicast network. Such a modification is an example of using a known technique [Bayrakeri's API for using multicast to communicate state changes between devices] to improve similar systems (McCanne's multicast overlay network) in the same way [McCanne's network modified to include the messaging API so that devices can keep each other updated as to their states]. *See MPEP § 2143.*

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOHM CHANKONG whose telephone number is (571)272-3942. The examiner can normally be reached on Monday-Friday [8:30 AM to 4:30 PM].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571.272.3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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